



January 31, 2014

To: Executive Board

Subject: **Front Facing Flip-Up Seats**

Recommendation

Provide direction to the Executive Director regarding the continued utilization of forward facing flip-up seats on Foothill Transit's bus fleet. The available options are:

- a) Disable all front-facing flip-up seats;
- b) Retrofit all coaches that currently have front-facing flip-up seats and no barriers (Note that NABI has proposed a no-cost retrofit of the 64 buses that are currently undergoing acceptance testing resulting in the loss of only one seat on that sub-fleet);
- c) Leave the front-facing flip-up seats in place.

Analysis

On December 13, 2013 Foothill Transit received a letter from NABI Bus, LLC (NABI) notifying Foothill Transit of a situation that could potentially expose certain bus riders to injuries.

The issue brought up by NABI is related to the first row of front-facing flip-up seats where no barriers exist immediately behind the open areas intended for wheelchair use. The letter indicates that three passengers on buses similar to NABI's were thrown forward from these seats in hard-braking incidents or collisions and these passengers sustained serious injuries. NABI specifically noted that none of their buses were involved in these accidents. The bus manufacturer that produced the buses involved in the accidents is not aware of any other similar injuries during the past 21 years in which the buses have been providing millions of miles of passenger service.

NABI has made the decision to discontinue installing forward-facing flip-up seats without barriers. They recommend that transit systems that have existing fleets of NABI buses disable the front-facing flip-up seats in their locked upright position thereby serving as barriers to seats immediately behind them. Barriers cannot be installed in front of these seats because they flip up in order to facilitate wheelchair access, and barriers would interfere with that access. NABI believes the current seating configuration is not defective and is not issuing a recall.

Fleet Seating Configuration

Foothill Transit has procured buses from several bus manufacturers over the years with different bus seating layouts. Each of those procurements were assigned a series



number to designate the year, model, type, and bus manufacturer. The current fleet consists of ten series of buses including the electric buses. Set out below are the different seat configurations and an indication of how many front-facing flip-up seats are in each series of buses.

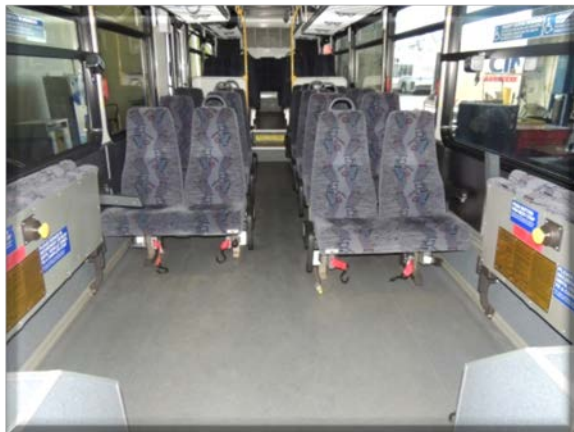
Series 2100 buses produced by NABI have two front-facing flip-up seats without barriers.



Series 1800 produced by NABI buses have four front-facing flip-up seats without barriers.



Series 1900 buses produced by NABI have four front-facing flip-up seats without barriers.



Series 1700 buses produced by NABI have four front-facing flip-up seats without barriers.





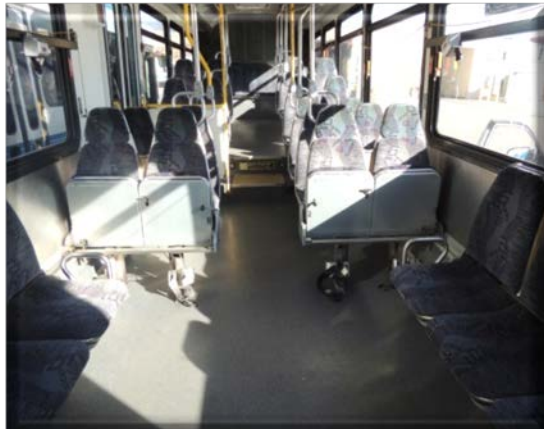
Series 1600 buses produced by NABI have four front-facing flip-up seats without barriers.



Series 1400 buses produced by NABI have two front-facing flip-up seats without barriers.



Series 1500 buses produced by NABI have four front-facing flip-up seats without barriers.



Series 1300 buses produced by Orion have four front-facing seats with barriers.

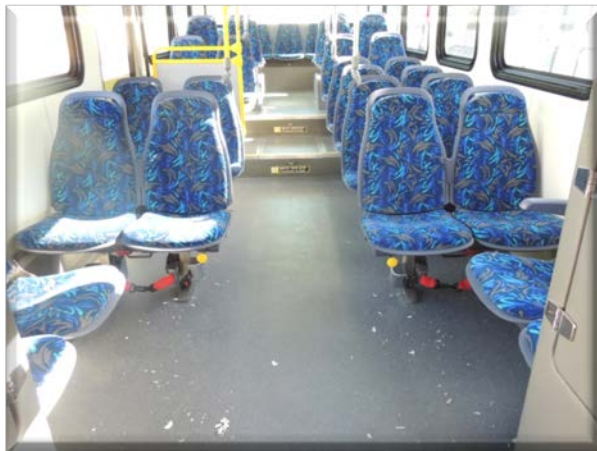




Series 1200 buses produced by Orion have four front-facing flip-up seats with barriers.



Series 2000 buses produced by Proterra have four front-facing flip-up seats without barriers.





Impact of disabling front-facing flip-up seats

If all of the existing front-facing flip-up seats on the Foothill Transit fleet are disabled, 694 seats or 5.3 percent of all available seats will be lost as set forth in the chart below. Replacing these seats would require procuring and operating 20 additional coaches.

Series	Number of buses	# of Seats	Total Seating Capacity	# Flip-up seats disabled	Total Seating Capacity after disabling flip-up seats
1200	25	41	1,025	0	1,025
1300	51	40	2,040	0	2,040
1400	75	40	3,000	150	2,850
1500	10	40	400	40	360
1600	30	58	1,740	120	1,620
1700	25	40	1,000	100	900
1800	12	40	480	48	432
1900	12	40	480	48	432
2000	15	35	525	60	465
2100	64	38	2,432	128	2,304
			13,122	694	12,428
			5.3% of seats lost		

NABI Recommended Retrofit

NABI has recently provided Foothill Transit with a proposed retrofit on the 64 buses that are currently undergoing acceptance testing resulting in the loss of only one seat instead of two. The retrofit would be accomplished by removal of the street side flip-up seats, installation of a barrier, and the addition of one aisle-facing seat. This option is available at no additional cost to Foothill Transit.

Foothill Transit is in the process of exercising an existing option with NABI to purchase 30 additional 42 ft. low floor CNG buses. These will be designated as Series 2200. At the December pre-production meeting, NABI proposed an adjustment to the location of the first four rows of front-facing seats to provide room for the installation of a barrier with the fourth row of seats being non-reclining seats. Two additional aisle facing seats will be installed, and thus no seats will be lost under NABI's proposed seating configuration.

The proposed retrofit to the NABI 2100 and 2200 series buses will require minor amendments to the existing contracts.

Although Foothill Transit and NABI have had substantial discussions about the 2100 and 2200 series buses, both parties have not reached any conclusions relative to the other NABI produced buses (Series 1400 – Series 1900). No discussions have taken place with Proterra on the Ecoliners.



APTA Conference Call

On January 10, the America Public Transportation Association (APTA) conducted a conference call to review and address the concerns relative to the front-facing flip-up seats. The purpose of the call was to provide more information concerning the experience of transit agencies, and to discuss the steps taken to-date to address the problem. APTA will not provide specific recommendations to transit providers.

APTA also indicated at this time no consideration being given to adding seatbelts on public transit buses. APTA will update its bus procurement guidelines to include the installation of barriers.

Budget Impact

If no retrofits on the existing fleet are made, there is no budget impact associated with this item. Should NABIs proposed retrofit to the current order of 64 coaches be approved, there is also no budget impact. If it is determined that Foothill Transit's current total seating capacity is to be retained, the budget impact would be driven by the cost to procure and operate 20 additional coaches. The feasibility and cost of retrofitting Foothill Transit's fleet of coaches that have front-facing, flip-up seats and no barriers is unknown at this time.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Roland M. Cordero'.

Roland M. Cordero
Director of Maintenance

A handwritten signature in blue ink, appearing to read 'Doran J. Barnes'.

Doran J. Barnes
Executive Director